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Remarks/Arguments

Claims 19-33 are pending. Applicants have amended claims 19, 24 and 29 to clarify the organization of the data management templates and the keywords in order to enforce the order of data loading. No new matter has been added to the prosecution of this application. For at least the reasons stated below, Applicants assert that all claims are in condition for allowance.

1. The New Amendments to the Claims

In the present Amendment, the independent claims have been further amended to clarify certain aspects of how the present invention operates to perform its data loads and subsequent reporting of errors and summaries. Specifically, the claims now require that the data files are uniquely organized around a set of keywords. Each keyword is from a hierarchical series of tiers. Importantly, this hierarchy of the keywords is used to enforce that data for all keywords in a first tier must be loaded before the data for keywords in a second tier can be loaded. There is nothing in the four cited references teaching such data load requirements. Nor is there any motivation in the references to enforce such a hierarchy of keywords.

2. The § 103 Rejections

Claims 19, 21, 24, 26, 29 and 31 remained rejected under 35 U.S.C. § 103 as being unpatentable over *Buchanan* (US Patent 5,267,155) in view of *Edwards* (US Patent 5,410,551) in view of *Hobbs* (US Patent 6,523,022) in view of *Lee* (US Patent 6,535,883). Applicants respectfully oppose these rejections as not only do the references fail to teach all of the claim limitations, but the Examiner has failed to assert a valid motivation to combine these references.

Claim 19 is directed to a system having data that is organized around a set of keywords where the keywords themselves are organized into a set of tiers such that data for keywords in a first tier must be loaded before the data for keywords in the second tier may be loaded, and then generating error and summary reports when as this tiered keyword related data, while storing user input data files in a multi-tier client/server architecture such that the data files are organized around tiers of keywords, comprising the steps of:

- (a) maintaining a connection between multiple user stations and a server having a database;

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- (b) receiving from one of the user stations a plurality of user input data files;
- (c) receiving a plurality of user-selected keywords, wherein data contained within said user input data files is organized around the keywords;
- (d) selecting a data management template corresponding to the keywords, wherein the data management template organizes the plurality of keywords into a tier structure, wherein keywords in a first tier must be loaded before keywords from a second tier are loaded;
- (e) validating that all data to be loaded into the database match the data management template by enforcing business rules/requirements and ensuring that referential integrity, codependency, primary key, required field, default field, sequence number, and hard-coded field checks are met;
- (f) loading the validated data into the database; and,
- (g) compiling a report identifying data that match the data management template and data that do not match the data management template.

A. The History of the Rejections

In the first Office action, the Examiner rejected the primary claim (i.e., claim 1, which dealt with generating error and summary reports for a data load) under 35 USC 103(a) as being unpatentable over *Buchanan* in view of *Edwards*. In response, Applicants deleted the first set of claims and introduced the new, more restricted claims, where the new primary claim (i.e., claim 19) also deals with generating error and summary reports for a data load, but further where the invention does so while storing user input data files in a multi-tier client/server architecture.

In the second Office action, the Examiner rejected the new primary claim 19 under 35 USC 103(a) as being unpatentable over *Buchanan* in view of *Edwards* in view of *Hobbs*.

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In other words, the Examiner added Hobbs as a third reference, stating that *Buchanan* plus *Edwards* plus *Hobbs* (i.e., B + E + H) makes Applicants' invention obvious. In response, Applicants further restricted claim 19 by requiring that the step of validating includes "enforcing business rules/requirements an ensuring that referential integrity, codependency, primary key, required field, default field, sequence number and hard-coded field checks are met".

In the following Advisory Action, the Examiner said that the amendment raised new issue requiring further searching. Applicants then filed an RCE so that the further searching could be accomplished.

In the third Office action, the Examiner continued to reject claim 19 under 35 USC 103(a) as being unpatentable over *Buchanan* in view of *Edwards* in view of *Hobbs*. To teach the newly amended element, the Examiner extended the chain of references by adding *Lee*. In other words, the Examiner now asserts that B + E + H + L makes Applicants' invention obvious. Applicants responded to that Office Action stating that the Examiner had not made a *prima facie* case of obviousness as the references were merely strung together without proper motivation to combine them.

In the present (fourth) Office action, the Examiner maintains his rejections, stating that he has indeed shown a valid motivation to combine the four prior art references. Applicants herein amend the primary claims to add additional restrictive elements that further set the invention apart from the cited references. Applicants also maintain their belief that the four references do not teach all of the elements in the claims, nor is there any valid motivation to combine the references.

B. The Four References do not Teach/Suggest At Least Four of the Claim Limitations

While the Examiner states that *Buchanan* teaches a computer-assisted document generation system, the Examiner admits *Buchanan* fails to teach elements (a) through (g) of the independent claim (see 2/26/2004, page 3). As claim 19 only consists of elements (a) through (g), the Examiner's admission is that *Buchanan* fails to teach any of the necessary elements.

The Examiner asserts that *Edwards'* network verification system teaches elements (e) through (g). The Examiner points to elements 160, 170, 180 and 190 in Figure 1, as well as column 26 lines 38-56 as support. Reading *Edwards'*

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description of figure 1, Applicants respectfully point out that Edwards does not teach or suggest any of elements (e) through (g).

Edwards teaches a "net verification" method for testing/validating physical networks within integrated circuits. The left side portion of figure 1A tests each potential response-developing points (PRDPs) within an IC to determine whether response transitions occur at these PRDP locations (see column 25, lines 15-40). Each PRDP has a location within the IC referred to by the coordinates X_iY_i . The verification steps through "each potentially response-developing point (PRDP) in sequence, X_1Y_1 , X_2Y_2 , X_3Y_3 , X_4Y_4 , etc." (column 26, lines 2-3) Where the proper transitions are observed, those RDPs are "recorded in a YES list" (column 25, line 29, See, 106 in figure 1C) which is shown in Figure 1A as the list 160. The second list 170 "is basically the design net-list for the system under test" (column 26, lines 31-32). The comparator 180 generates an error report 190. If the error report has something that is in list 1 (160) but not in list 2 (170), then this "indicates a probably short circuit between the net node and the response-developing point" (column 26, 45-47).

For example, the design net-list may state that PRDP locations X_1Y_1 , $X_{25}Y_{25}$, and $X_{300}Y_{300}$ should have transitions that occur under test. The validation process may find that two of these location do indeed demonstrate transitions, but that another two locations demonstrate transitions as well. Thus, list 1 (160 of figure 1) and list 2 (170 of figure 1A) may look like this:

LIST 1 (element 160)	LIST 2 (element 170)
$X_{25}Y_{25}$	X_1Y_1
$X_{70}Y_{70}$	$X_{25}Y_{25}$
$X_{300}Y_{300}$	$X_{300}Y_{300}$
$X_{305}Y_{305}$	

As the above of the Edwards invention shows, It is used to validate physical locations within an integrated circuit and to create a list of those locations that perform under test correctly. Figure 1A does not teach or suggest the claim's element (e) because Edwards does not load data into a database, nor does it validate

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such data against a template, where the validation checks business rules/requirements, referential integrity, codependency, primary key, required field, default field, sequence number, and hard-coded fields.

Nor does Edwards teach element (f) since data is not loaded into a database. It is merely maintained as two lists (160 and 170) that are used to produce an error report. Edwards does not teach element (g) either. While an error report is generated, this report does not identify "data that match the data management template".

The Examiner relies on Hobbs to teach elements (a) through (d) of the claim, citing: column 1, lines 20-42; column 14, line 42 to column 15, line 42; figure 3 (element 200, 210, 230); and figure 4 (element 202, 203). The Examiner relies on Lee to teach comparison templates that are capable of enforcing business rules/requirements, to ensure referential integrity, codependency, primary key, etc.

Applicants assert that, at a minimum, Hobbs and Lee do not teach or suggest organizing the keywords into a tier structure, where the tiers indicate the order that the data must be loaded into the database, as required in element (d) of the amended claim. As the four cited references fail to teach or suggest at least four of the limitations of the independent claims (i.e., the tiered organization to indicate the order of data loading, element (e), element (f) and element (g)), Applicants respectfully assert that there is no combination of the four cited references that teaches or suggests each and every element of the independent claims.

C. The Motivation to Combine the Four References Does Not Appear Reasonable.

In the present Office action, the Examiner asserts that he has made a *prima facie* obviousness case because he has "presented evidence of corresponding claim elements in the prior art and has expressly articulated the combinations and the motivations for combinations that fairly suggest Applicants' claimed invention (see: dated 2/26/2004)".

In this February 2004 paper, the Examiner based his rejection firstly on the teachings of Buchanan (see 2/26/2004, page 3). The Examiner admits that Buchanan's computer-assisted document generation system fails to teach some of the elements of claim 19 (2/26/2004, page 3). He then states that Edwards teaches a network verification system. The Examiner held that it would have been obvious to combine the teachings of Buchanan and Edwards "to include the validation of the loaded data as well as the compiling

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and generation of an error report as taught by Edwards within a computer-assisted document template system with a relational database as taught by Buchanan" because "detecting and preparing a summary report of matched and unmatched data in a database with better informs the user of any discrepancy involved with data being stored in the database."

Applicants respectfully find this motivation unconvincing. One skilled in the art at the time of the Applicants' invention would be concerned with the problem of (per the preamble of claim 19): error and summary reports for data loads that result from data associated to keywords organized in a specific set of tiers. Such a person skilled in the art seeking find how to build such specialized data loads and error/summary reports would not have a motivation to search for answers in the Buchanan patent since Buchanan is directed to "Computer-Assisted Document Generation" for "enhancing or replacing the dictation and transcription process" (see Title and Abstract). Nor would one skilled in the art then look to the Edwards patent since Edwards is directed to "Net Verification" for verifying "proper interconnections of an Interconnect network" (see Title and Abstract). Applicants respectfully assert that one skilled in the art would not search out the Buchanan and Edwards patents to solve the problem at hand. Even if the person skilled in the art read the Buchanan and Edwards patents, he or she would not find a link between these documents causing the motivation listed by the Examiner, which has been stated by the Examiner as: "detecting and preparing a summary report of matched and unmatched data in a database with better informs the user of any discrepancy involved with data being stored in the database."

The Examiner agrees that Buchanan and Edwards do not teach/suggest all of the components of claim 19, but the person skilled in the art would then need to look to the Hobbs patent. Applicants disagree. The skilled artisan, seeking to find how to build such error and summary reports would not have a motivation to search for answers in the Hobbs patent since Hobbs is directed to "Selectively Augmenting Retrieved Information from a Network Resource" for "selecting multi-media information, such as video, audio, graphics and text residing on a plurality of Data Warehouses ... for linking the multimedia information across the Internet" (see Title and Abstract).

The Examiner asserts that once the person skilled in the art would find the Hobbs patent, it would be obvious to be motivated to combine it with Edwards and Buchanan because it gives the motivation of "connecting linked terms to database records or templates, thereby saving enormous labor and time cost involved in updating a database"

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(page 6). Applicants respectfully submit that one reading Hobbs would not find such a motivation.

Finally, the Examiner continues the journey of linking Buchanan, Edwards and Hobbs to the Lee patent. The Examiner states that Lee would motivate the person skilled in the art to link it with the other three patents because one skilled in the art would have "found it obvious to include validation rules and comparison templates as taught by Lee ... with the motivation of using validation rules to test the content of field entered by a user to ensure that field is filled out correctly thereby catching any errors" (page 7). Applicants agree that one skilled in the art who was seeking a way to validate data might look to Lee's teaching of validation rules. But such a user would not have already combined/linked the teachings of Buchanan, Edwards and Hobbs.

D. The Four References are not in the Same Field as the Applicants' invention.

Applicants respectfully disagree with some of the Examiner's reliance on his cited case law. On pages 3 and 4, the Examiner believes that "establishing a *prima facie* case of obviousness is determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments" (citing *In re Oetiker*). Yet the Examiner's arguments on what would motivate one skilled in the art to find and combine the teachings of the four cited patents is not logically presented. While the Examiner cites to *In re Oetiker*, the Examiner fails to follow *Oetiker's* assertion that "the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned" (*Oetiker*, 1445, cited by Examiner on page 5).

As discussed previously, the Applicants were faced with the problem of "error and summary reports for data loads that result from data associated to keywords organized in a specific set of tiers." The Buchanan reference is not in the field of data loads and error reports, nor in data associated to keywords that are arranged in a hierarchy to indicate what order their data should be loaded. Rather, Buchanan is in the field of computer-assisted document generation.

The Edwards reference is not in the field of data loads and error reports. Rather, Edwards is in the field of verifying proper interconnections of an interconnect network. The Hobbs reference is not in the field of data loads and error reports. Rather, Hobbs is in the field of selectively retrieving multimedia information from a data warehouse. These references are not in the Applicants' field nor are they reasonably pertinent to the problem

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faced by the Applicants. As In re Oetiker nicely summarizes the issue: "It is necessary to consider ... common sense in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor" (Oetiker, 1446). While the Examiner states on page 6 that Buchanan, Edwards, Hobbs and Lee are all in the same field as the Applicant's endeavor since they all "relate to report generation and validation of data loads using an error report", a common sense reading of the four references does not support this statement.

3. Summary

Applicants maintain their assertion that a *prima facie* case of obviousness has not yet been made and therefore the 35 USC § 103 rejections should therefore be withdrawn. Using the claim as a blueprint to chain together the four references in hindsight is an "illogical and inappropriate process by which to determine patentability." Rouffet.

Applicants submit that all pending claims are allowable over the art of record and respectfully requests that a Notice of Allowance be issued in this case. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at 612-607-7508. If any fees are due in connection with the filing of this paper, then the Commissioner is authorized to charge such fees including fees for any extension of time, to Deposit Account No. 50-1901 (Docket 060021-340501).

Respectfully submitted,



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